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**Search Results -**

Terms	Documents
L2 with (muta\$ or substitut\$ or replace\$)	17

Database: 

US Patents Full-Text Database	▲
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Derwent World Patents Index	
IBM Technical Disclosure Bulletins	▼

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L3

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result set

DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

<u>L3</u>	L2 with (muta\$ or substitut\$ or replace\$)
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17   L3

<u>L2</u>	L1
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223   L2

DB=USPT; PLUR=YES; OP=ADJ

<u>L1</u>	pyruvate carboxylase
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223   L1

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 17 returned.**☐ 1. Document ID: US 6503748 B2

L3: Entry 1 of 17

File: USPT

Jan 7, 2003

US-PAT-NO: 6503748

DOCUMENT-IDENTIFIER: US 6503748 B2

TITLE: Endogenous ketogulonigenium plasmid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 2. Document ID: US 6485966 B2

L3: Entry 2 of 17

File: USPT

Nov 26, 2002

US-PAT-NO: 6485966

DOCUMENT-IDENTIFIER: US 6485966 B2

TITLE: Compositions and methods for helper-free production of recombinant adeno-associated viruses

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	-----------	-------

☐ 3. Document ID: US 6472212 B1

L3: Entry 3 of 17

File: USPT

Oct 29, 2002

US-PAT-NO: 6472212

DOCUMENT-IDENTIFIER: US 6472212 B1

TITLE: Methods and compositions for genetically modifying primate bone marrow cells

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	-----------	-------

☐ 4. Document ID: US 6455284 B1

L3: Entry 4 of 17

File: USPT

Sep 24, 2002

US-PAT-NO: 6455284

DOCUMENT-IDENTIFIER: US 6455284 B1

TITLE: Metabolically engineered E. coli for enhanced production of oxaloacetate-derived biochemicals

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	-----------	-------

☐ 5. Document ID: US 6403351 B1

L3: Entry 5 of 17

File: USPT

Jun 11, 2002

US-PAT-NO: 6403351

DOCUMENT-IDENTIFIER: US 6403351 B1

TITLE: Pyruvate carboxylase polypeptide from Corynebacterium glutamicum

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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☐ 6. Document ID: US 6338962 B1

L3: Entry 6 of 17

File: USPT

Jan 15, 2002

US-PAT-NO: 6338962

DOCUMENT-IDENTIFIER: US 6338962 B1

TITLE: Use of a non-mammalian DNA virus to express an exogenous gene in a mammalian cell

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 7. Document ID: US 6338953 B1

L3: Entry 7 of 17

File: USPT

Jan 15, 2002

US-PAT-NO: 6338953

DOCUMENT-IDENTIFIER: US 6338953 B1

TITLE: Expression of an exogenous gene in a mammalian cell by use of a non-mammalian DNA virus having an altered coat protein

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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☐ 8. Document ID: US 6281009 B1

L3: Entry 8 of 17

File: USPT

Aug 28, 2001

US-PAT-NO: 6281009

DOCUMENT-IDENTIFIER: US 6281009 B1

TITLE: Use of a non-mammalian DNA virus to express an exogenous gene in a mammalian cell

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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☐ 9. Document ID: US 6258595 B1

L3: Entry 9 of 17

File: USPT

Jul 10, 2001

US-PAT-NO: 6258595

DOCUMENT-IDENTIFIER: US 6258595 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Compositions and methods for helper-free production of recombinant adeno-associated viruses

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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☐ 10. Document ID: US 6238914 B1

L3: Entry 10 of 17

File: USPT

May 29, 2001

US-PAT-NO: 6238914

DOCUMENT-IDENTIFIER: US 6238914 B1

TITLE: Use of a non-mammalian DNA virus to express an exogenous gene in a mammalian cell

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 11 through 17 of 17 returned.**☐ 11. Document ID: US 6190887 B1

L3: Entry 11 of 17

File: USPT

Feb 20, 2001

US-PAT-NO: 6190887

DOCUMENT-IDENTIFIER: US 6190887 B1

TITLE: Expression of an exogenous gene in a mammalian cell by use of a non-mammalian DNA virus having an altered coat protein

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KIMC](#) | [Draw Desc](#) | [Image](#)☐ 12. Document ID: US 6183993 B1

L3: Entry 12 of 17

File: USPT

Feb 6, 2001

US-PAT-NO: 6183993

DOCUMENT-IDENTIFIER: US 6183993 B1

TITLE: Complement-resistant non-mammalian DNA viruses and uses thereof

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KIMC](#) | [Draw Desc](#) | [Image](#)☐ 13. Document ID: US 6171833 B1

L3: Entry 13 of 17

File: USPT

Jan 9, 2001

US-PAT-NO: 6171833

DOCUMENT-IDENTIFIER: US 6171833 B1

TITLE: Pyruvate carboxylase from corynebacterium glutamicum

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KIMC](#) | [Draw Desc](#) | [Image](#)☐ 14. Document ID: US 6165500 A

L3: Entry 14 of 17

File: USPT

Dec 26, 2000

US-PAT-NO: 6165500

DOCUMENT-IDENTIFIER: US 6165500 A

TITLE: Preparation for the application of agents in mini-droplets

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KIMC](#) | [Draw Desc](#) | [Image](#)

☐ 15. Document ID: US 5871986 A

L3: Entry 15 of 17

File: USPT

Feb 16, 1999

US-PAT-NO: 5871986

DOCUMENT-IDENTIFIER: US 5871986 A

TITLE: Use of a baculovirus to express and exogenous gene in a mammalian cell

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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☐ 16. Document ID: US 5731182 A

L3: Entry 16 of 17

File: USPT

Mar 24, 1998

US-PAT-NO: 5731182

DOCUMENT-IDENTIFIER: US 5731182 A

TITLE: Non-mammalian DNA virus to express an exogenous gene in a mammalian cell

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 17. Document ID: US 5573945 A

L3: Entry 17 of 17

File: USPT

Nov 12, 1996

US-PAT-NO: 5573945

DOCUMENT-IDENTIFIER: US 5573945 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Mutant and method for producing L-glutamic acid by fermentation

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
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L2 with (muta\$ or substitut\$ or replace\$)	17

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NEWS 3 Jun 03 New e-mail delivery for search results now available  
NEWS 4 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
NEWS 11 Oct 24 BEILSTEIN adds new search fields  
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN  
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 14 Nov 25 More calculated properties added to REGISTRY  
NEWS 15 Dec 04 CSA files on STN  
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date  
NEWS 17 Dec 17 TOXCENTER enhanced with additional content  
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN  
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,  
ENERGY, INSPEC  
NEWS 20 Feb 13 CANCERLIT is no longer being updated  
NEWS 21 Feb 24 METADEX enhancements  
NEWS 22 Feb 24 PCTGEN now available on STN  
NEWS 23 Feb 24 TEMA now available on STN  
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation  
NEWS 25 Feb 26 PCTFULL now contains images  
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
NEWS 27 Mar 19 APOLLIT offering free connect time in April 2003  
NEWS 28 Mar 20 EVENTLINE will be removed from STN  
NEWS 29 Mar 24 PATDPAFULL now available on STN  
NEWS 30 Mar 24 Additional information for trade-named substances without  
structures available in REGISTRY  
NEWS 31 Mar 24 Indexing from 1957 to 1966 added to records in CA/CAPLUS  
NEWS 32 Apr 11 Display formats in DGENE enhanced  
NEWS 33 Apr 14 MEDLINE Reload

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
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NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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=> .eliz

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For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> fil .eliz

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SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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=> s pyruvate carboxylase

L1 8868 PYRUVATE CARBOXYLASE

=> s l1 (10a) (muta? or substitut? or replace?)

6 FILES SEARCHED...

L2 269 L1 (10A) (MUTA? OR SUBSTITUT? OR REPLACE?)

=> s l1 (10a) (muta? or substitut? or variant or replace?)

6 FILES SEARCHED...

L3 296 L1 (10A) (MUTA? OR SUBSTITUT? OR VARIANT OR REPLACE?)

=> dup rem l3



PROCESSING COMPLETED FOR L3  
L4 117 DUP REM L3 (179 DUPLICATES REMOVED)

=> s 11 (5a) (muta? or variant)  
10 FILES SEARCHED...

L5 210 L1 (5A) (MUTA? OR VARIANT)

=> dup rem 15  
PROCESSING COMPLETED FOR L5  
L6 83 DUP REM L5 (127 DUPLICATES REMOVED)

=> d 1-10

L6 ANSWER 1 OF 83 MEDLINE DUPLICATE 1  
AN 2003060496 MEDLINE  
DN 22458341 PubMed ID: 12437512  
TI Expression and characterization of a human **pyruvate carboxylase variant** by retroviral gene transfer.  
AU Carbone Mary Anna; Robinson Brian H  
CS Research Institute, The Hospital for Sick Children, 555 University Avenue, Toronto, ON, Canada M5G 1X8.  
SO BIOCHEMICAL JOURNAL, (2003 Feb 15) 370 (Pt 1) 275-82.  
Journal code: 2984726R. ISSN: 0264-6021.  
CY England: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200303  
ED Entered STN: 20030207  
Last Updated on STN: 20030316  
Entered Medline: 20030314

L6 ANSWER 2 OF 83 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 2  
AN 2002:293852 HCAPLUS  
DN 136:321288  
TI Sequence of feedback-resistant pyruvate carboxylase from *Corynebacterium glutamicum* and their uses  
IN Hanke, Paul D.  
PA Archer-Daniels-Midland Company, USA  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002031158	A2	20020418	WO 2001-US31893	20011012
	WO 2002031158	A3	20030109		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002013146	A5	20020422	AU 2002-13146	20011012
	US 2002177202	A1	20021128	US 2001-974973	20011012
PRAI	US 2000-239913P	P	20001013		
	WO 2001-US31893	W	20011012		

L6 ANSWER 3 OF 83 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI  
AN 2002-16323 BIOTECHDS  
TI Novel **mutated**, feedback resistant **pyruvate carboxylase** enzyme polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine, L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine;  
plasmid-mediated recombinant enzyme gene transfer and expression in

## Corynebacterium sp.

AU HANKE P D  
PA ARCHER-DANIELS MIDLAND CO  
PI WO 2002031158 18 Apr 2002  
AI WO 2000-US31893 13 Oct 2000  
PRAI US 2000-239913 13 Oct 2000  
DT Patent  
LA English  
OS WPI: 2002-463267 [49]

L6 ANSWER 4 OF 83 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:791974 HCAPLUS

DN 137:309601

TI Mutations in the mqo gene of a amino acid-producing Corynebacterium glutamicum affecting yields

IN Farwick, Mike; Bathe, Brigitte; Hermann, Thomas; Marx, Achim; Pfefferle, Walter

PA Degussa AG, Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10117816	A1	20021017	DE 2001-10117816	20010410
	WO 2002086137	A2	20021031	WO 2002-EP3728	20020404
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003044943	A1	20030306	US 2002-118325	20020409
PRAI	DE 2001-10117816	A	20010410		
	US 2002-352212P	P	20020129		

L6 ANSWER 5 OF 83 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:349112 HCAPLUS

DN 136:354249

TI Fermentative production of L-amino acids with poxB mutants of Enterobacteriaceae

IN Thierbach, Georg; Rieping, Mechthild

PA Degussa A.-G., Germany

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10112107	A1	20020508	DE 2001-10112107	20010314
	WO 2002036797	A2	20020510	WO 2001-EP11228	20010928
	WO 2002036797	A3	20021114		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002015910	A5	20020515	AU 2002-15910	20010928
	US 2003017554	A1	20030123	US 2002-76416	20020219
PRAI	DE 2000-10054748	IA	20001104		

US 2000-248210P P 20001  
DE 2001-10112107 A 20010314  
US 2001-283612P P 20010416  
WO 2001-EP11228 W 20010928  
US 2001-987541 B1 20011115

L6 ANSWER 6 OF 83 SCISEARCH COPYRIGHT 2003 ISI (R) DUPLICATE 3  
AN 2002:295166 SCISEARCH  
GA The Genuine Article (R) Number: 535WJ  
TI Effect of *aniA* (carbon flux regulator) and *phaC* (poly-beta-hydroxybutyrate synthase) mutations on pyruvate metabolism in *Rhizobium etli*  
AU Dunn M F (Reprint); Araiza G; Encarnacion S; del Vargas M; Mora J  
CS Univ Nacl Autonoma Mexico, Ctr Invest Fijac Nitrogeno, Programa Ingn Metab, Apartado Postal 565-A, Cuernavaca, Morelos, Mexico (Reprint); Univ Nacl Autonoma Mexico, Ctr Invest Fijac Nitrogeno, Programa Ingn Metab, Cuernavaca, Morelos, Mexico  
CYA Mexico  
SO JOURNAL OF BACTERIOLOGY, (APR 2002) Vol. 184, No. 8, pp. 2296-2299.  
Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA.  
ISSN: 0021-9193.  
DT Article; Journal  
LA English  
REC Reference Count: 26  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L6 ANSWER 7 OF 83 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 2002:594429 BIOSIS  
DN PREV200200594429  
TI Differential expression of **pyruvate carboxylase** 5'UTR **variants** during transition to lactation.  
AU Agca, C. (1); Donkin, S. S. (1)  
CS (1) Purdue University, West Lafayette, IN USA  
SO Journal of Dairy Science, (2002) Vol. 85, No. Supplement 1, pp. 302.  
<http://www.ADSA.org/jds>. print.  
Meeting Info.: Meeting of the American Society of Animal Science and the American Dairy Science Association Quebec City, Quebec, Canada July 20-25, 2002 American Society of Animal Science  
. ISSN: 0022-0302.  
DT Conference  
LA English

L6 ANSWER 8 OF 83 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 2002:608213 BIOSIS  
DN PREV200200608213  
TI Characterization of a **pyruvate carboxylase** **mutant** of *Azotobacter vinelandii*: Effect on the accumulation of the reserve polymer polyhydroxybutyrate (PHB).  
AU Segura, D. (1); Cruz, T. (1); Espin, G. (1)  
CS (1) Instituto de Biotecnologia, Universidad Nacional Autonoma de Mexico, Cuernavaca, MOR Mexico  
SO Abstracts of the General Meeting of the American Society for Microbiology, (2002) Vol. 102, pp. 281. <http://www.asmtg.org/mtgsrc/generalmeeting.htm>. print.  
Meeting Info.: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002 American Society for Microbiology  
. ISSN: 1060-2011.  
DT Conference  
LA English

L6 ANSWER 9 OF 83 MEDLINE DUPLICATE 4  
AN 2002144336 MEDLINE  
DN 21865288 PubMed ID: 11876415  
TI A novel methodology employing *Corynebacterium glutamicum* genome information to generate a new L-lysine-producing mutant.  
AU Ohnishi J; Mitsuhashi S; Hayashi M; Ando S; Yokoi H; Ochiai K; Ikeda M  
CS Tokyo Research Laboratories, Kyowa Hakko Kogyo Co, Ltd, Machida, Japan.  
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (2002 Feb) 58 (2) 217-23.

Journal code: 8406612. ISSN 175-7598.  
 CY Germany: Germany, Federal Republic of  
 DT (EVALUATION STUDIES)  
 Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-AX120365; GENBANK-AX120849; GENBANK-AX123536  
 EM 200209  
 ED Entered STN: 20020307  
 Last Updated on STN: 20020928  
 Entered Medline: 20020927

L6 ANSWER 10 OF 83 MEDLINE DUPLICATE 5  
 AN 2002366648 MEDLINE  
 DN 22106101 PubMed ID: 12112657  
 TI Intron retention and frameshift **mutations** result in severe  
**pyruvate carboxylase** deficiency in two male siblings.  
 AU Carbone Mary Anna; Applegarth Derek A; Robinson Brian H  
 CS Research Institute, Hospital for Sick Children and the Department of  
 Biochemistry at the University of Toronto, Toronto, Ontario, Canada.  
 SO HUMAN MUTATION, (2002 Jul) 20 (1) 48-56.  
 Journal code: 9215429. ISSN: 1098-1004..  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200208  
 ED Entered STN: 20020712  
 Last Updated on STN: 20020806  
 Entered Medline: 20020805

=> s l6 and py<=2000  
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 Numeric values may contain 1-8 significant figures. If range notation  
 is used, both the beginning and the end of the range must be  
 specified, e.g., '250-300/MW'. Expressions such as '250-/MW' are not  
 allowed. To search for values above or below a given number, use the  
 >, >=, <, or <= operators, e.g., 'MW >= 250'. Text terms cannot be  
 used in numeric expressions. If you specify a unit, it must be  
 dimensionally correct for that field code. To see the unit  
 designations for field codes in the current file, enter "DISPLAY UNIT  
 ALL" at an arrow prompt (=>).

=> s l6 and py<=2000  
 3 FILES SEARCHED...  
 5 FILES SEARCHED...  
 8 FILES SEARCHED...  
 L7 68 L6 AND PY<=2000

=> d 1-10

L7 ANSWER 1 OF 68 MEDLINE  
 AN 1999181426 MEDLINE  
 DN 99181426 PubMed ID: 10081585  
 TI Physiological characterisation of a **pyruvate-carboxylase**  
 -negative *Saccharomyces cerevisiae* **mutant** in batch and chemostat  
 cultures.  
 AU de Jong-Gubbels P; Bauer J; Niederberger P; Stuckrath I; Kotter P; van

CS Dijken J P; Pronk J T  
 Kluyver Institute of Biotechnology, Delft University of Technology, The Netherlands.  
 SO ANTONIE VAN LEEUWENHOEK, (1998 Nov) 74 (4) 253-63.  
 Journal code: 0372625. ISSN: 0003-6072.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199905  
 ED Entered STN: 19990517  
 Last Updated on STN: 19990517  
 Entered Medline: 19990503

L7 ANSWER 2 OF 68 MEDLINE  
 AN 1998301182 MEDLINE  
 DN 98301182 PubMed ID: 9639311  
 TI Isolation of the *Pichia pastoris* PYC1 gene encoding pyruvate carboxylase and identification of a suppressor of the pyc phenotype.  
 AU Menendez J; Delgado J; Gancedo C  
 CS Centro de Ingenieria Genetica y Biotecnologia, Havana, Cuba.  
 SO YEAST, (1998 May) 14 (7) 647-54.  
 Journal code: 8607637. ISSN: 0749-503X.  
 CY ENGLAND: United Kingdom  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-Y11106  
 EM 199809  
 ED Entered STN: 19980925  
 Last Updated on STN: 19980925  
 Entered Medline: 19980915

L7 ANSWER 3 OF 68 MEDLINE  
 AN 97420476 MEDLINE  
 DN 97420476 PubMed ID: 9276461  
 TI Expression of PEP carboxylase from *Escherichia coli* complements the phenotypic effects of **pyruvate carboxylase mutations** in *Saccharomyces cerevisiae*.  
 AU Flores C L; Gancedo C  
 CS Instituto de Investigaciones Biomedicas, Unidad de Bioquimica y Genetica de Levaduras, Madrid, Spain.  
 SO FEBS LETTERS, (1997 Aug 4) 412 (3) 531-4.  
 Journal code: 0155157. ISSN: 0014-5793.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199709  
 ED Entered STN: 19970922  
 Last Updated on STN: 19980206  
 Entered Medline: 19970911

L7 ANSWER 4 OF 68 MEDLINE  
 AN 96427329 MEDLINE  
 DN 96427329 PubMed ID: 8830693  
 TI **Pyruvate carboxylase** from *Rhizobium etli*: **mutant** characterization, nucleotide sequence, and physiological role.  
 AU Dunn M F; Encarnacion S; Araiza G; Vargas M C; Davalos A; Peralta H; Mora Y; Mora J  
 CS Departamento de Ecologia Molecular, Centro de Investigacion sobre Fijacion de Nitrogeno, Universidad Nacional Autonoma de Mexico, Cuernavaca, Morelos.. mike@cifn.unam.mx  
 SO JOURNAL OF BACTERIOLOGY, (1996 Oct) 178 (20) 5960-70.  
 Journal code: 2985120R. ISSN: 0021-9193.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English

FS Priority Journals  
 OS GENBANK-U51439  
 EM 199612  
 ED Entered STN: 19970128  
 Last Updated on STN: 19980206  
 Entered Medline: 19961203

L7 ANSWER 5 OF 68 MEDLINE  
 AN 96128228 MEDLINE  
 DN 96128228 PubMed ID: 8543050  
 TI A mutation affecting carbon catabolite repression suppresses growth defects in **pyruvate carboxylase mutants** from *Saccharomyces cerevisiae*.  
 AU Blazquez M A; Gamo F J; Gancedo C  
 CS Instituto de Investigaciones Biomedicas del C.S.I.C., Unidad de Bioquimica y Genetica de Levaduras, Madrid, Spain.  
 SO FEBS LETTERS, (1995 Dec 18) 377 (2) 197-200.  
 Journal code: 0155157. ISSN: 0014-5793.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199602  
 ED Entered STN: 19960227  
 Last Updated on STN: 19960227  
 Entered Medline: 19960213

L7 ANSWER 6 OF 68 MEDLINE  
 AN 92111527 MEDLINE  
 DN 92111527 PubMed ID: 1765093  
 TI Site-directed mutagenesis of the conserved histidine residue of phosphoenolpyruvate carboxylase. His138 is essential for the second partial reaction.  
 AU Terada K; Izui K  
 CS Department of Chemistry, Faculty of Science, Kyoto University, Japan.  
 SO EUROPEAN JOURNAL OF BIOCHEMISTRY, (1991 Dec 18) 202 (3) 797-803.  
 Journal code: 0107600. ISSN: 0014-2956.  
 CY GERMANY; Germany, Federal Republic of  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199202  
 ED Entered STN: 19920308  
 Last Updated on STN: 19920308  
 Entered Medline: 19920214

L7 ANSWER 7 OF 68 MEDLINE  
 AN 91367547 MEDLINE  
 DN 91367547 PubMed ID: 1909777  
 TI **Pyruvate carboxylase** deficiency: a benign variant with normal development.  
 AU Van Coster R N; Fernhoff P M; De Vivo D C  
 CS Division of Pediatric Neurology, Columbia Presbyterian Medical Center, New York, New York 10032.  
 SO PEDIATRIC RESEARCH, (1991 Jul) 30 (1) 1-4.  
 Journal code: 0100714. ISSN: 0031-3998.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199110  
 ED Entered STN: 19911103  
 Last Updated on STN: 20000303  
 Entered Medline: 19911017

L7 ANSWER 8 OF 68 MEDLINE  
 AN 91337144 MEDLINE  
 DN 91337144 PubMed ID: 1872883  
 TI Isolation of a yeast mutant deficient in **pyruvate**

**carboxylase activity.**  
 AU Walker M E; Wallace J C  
 CS Department of Biochemistry, University of Adelaide, South Australia.  
 SO BIOCHEMISTRY INTERNATIONAL, (1991 Mar) 23 (4) 697-705.  
 Journal code: 8100311. ISSN: 0158-5231.  
 CY Australia  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199109  
 ED Entered STN: 19911006  
 Last Updated on STN: 19911006  
 Entered Medline: 19910919

L7 ANSWER 9 OF 68 MEDLINE  
 AN 88051001 MEDLINE  
 DN 88051001 PubMed ID: 3315006  
 TI <sup>13</sup>C-NMR analysis of Aspergillus mutants disturbed in pyruvate metabolism.  
 AU Dijkema C; Visser J  
 CS Department of Molecular Physics, Agricultural University, Wageningen, The Netherlands.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1987 Dec 10) 931 (3) 311-9.  
 Journal code: 0217513. ISSN: 0006-3002.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 198801  
 ED Entered STN: 19900305  
 Last Updated on STN: 19970203  
 Entered Medline: 19880115

L7 ANSWER 10 OF 68 MEDLINE  
 AN 88022791 MEDLINE  
 DN 88022791 PubMed ID: 3116940  
 TI **Pyruvate carboxylase** in the yeast pyc mutant  
 AU Lim F; Rohde M; Morris C P; Wallace J C  
 CS Department of Biochemistry, University of Adelaide, Australia.  
 SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1987 Oct) 258 (1) 259-64.  
 Journal code: 0372430. ISSN: 0003-9861.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 198711  
 ED Entered STN: 19900305  
 Last Updated on STN: 19990129  
 Entered Medline: 19871112

=> d 11-20

L7 ANSWER 11 OF 68 MEDLINE  
 AN 87062482 MEDLINE  
 DN 87062482 PubMed ID: 3939532  
 TI Pyruvate carboxylase deficiencies: complementation studies between "French" and "American" phenotypes in cultured fibroblasts.  
 AU Augereau C; Pham Dinh D; Moncion A; Marsac C; Saudubray J M; Robinson B H  
 SO JOURNAL OF INHERITED METABOLIC DISEASE, (1985) 8 (2) 59-62.  
 Journal code: 7910918. ISSN: 0141-8955.  
 CY ENGLAND: United Kingdom  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 198701  
 ED Entered STN: 19900302  
 Last Updated on STN: 20000303

Entered Medline: 19870109

L7 ANSWER 12 OF 68 MEDLINE  
AN 87035556 MEDLINE  
DN 87035556 PubMed ID: 3534135  
TI Characterization of *Aspergillus nidulans* mutants in carbon metabolism isolated after D-galacturonate enrichment.  
AU Uitzetter J H; Bos C J; Visser J  
SO JOURNAL OF GENERAL MICROBIOLOGY, (1986 May) 132 ( Pt 5) 1167-72.  
Journal code: 0375371. ISSN: 0022-1287.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198612  
ED Entered STN: 19900302  
Last Updated on STN: 19980206  
Entered Medline: 19861205

L7 ANSWER 13 OF 68 MEDLINE  
AN 85120902 MEDLINE  
DN 85120902 PubMed ID: 3882052  
TI **Pyruvate carboxylase** deficiency in yeast: a mutant affecting the interaction between the glyoxylate and Krebs cycles.  
AU Wills C; Melham T  
NC GM 32025 (NIGMS)  
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1985 Feb 1) 236 (2) 782-91.  
Journal code: 0372430. ISSN: 0003-9861.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198503  
ED Entered STN: 19900320  
Last Updated on STN: 19970203  
Entered Medline: 19850321

L7 ANSWER 14 OF 68 MEDLINE  
AN 84175963 MEDLINE  
DN 84175963 PubMed ID: 6424438  
TI The molecular basis for the two different clinical presentations of classical pyruvate carboxylase deficiency.  
AU Robinson B H; Oei J; Sherwood W G; Applegarth D; Wong L; Haworth J; Goodyer P; Casey R; Zaleski L A  
SO AMERICAN JOURNAL OF HUMAN GENETICS, (1984 Mar) 36 (2) 283-94.  
Journal code: 0370475. ISSN: 0002-9297.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198405  
ED Entered STN: 19900319  
Last Updated on STN: 20000303  
Entered Medline: 19840502

L7 ANSWER 15 OF 68 MEDLINE  
AN 83285866 MEDLINE  
DN 83285866 PubMed ID: 6883708  
TI A mutation of **pyruvate carboxylase** in fibroblasts from a patient with severe, chronic lactic acidemia.  
AU Hansen T L; Christensen E; Willems J L; Trijbels J M  
SO CLINICA CHIMICA ACTA, (1983 Jun 30) 131 (1-2) 39-44.  
Journal code: 1302422. ISSN: 0009-8981.  
CY Netherlands  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals



EM 198310  
ED Entered STN: 19900319  
Last Updated on STN: 19990129  
Entered Medline: 19831008

L7 ANSWER 16 OF 68 MEDLINE  
AN 80008066 MEDLINE  
DN 80008066 PubMed ID: 479837  
TI The control of the synthesis of isocitrate lyase in a thermophilic bacillus.  
AU Griffiths M W  
SO JOURNAL OF GENERAL MICROBIOLOGY, (1979 Jun) 112 (2) 357-64.  
Journal code: 0375371. ISSN: 0022-1287.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 197911  
ED Entered STN: 19900315  
Last Updated on STN: 19980206  
Entered Medline: 19791128

L7 ANSWER 17 OF 68 MEDLINE  
AN 78152784 MEDLINE  
DN 78152784 PubMed ID: 417147  
TI A heat-sensitive lysis mutant of Bacillus subtilis 168 with a low activity of pyruvate carboxylase.  
AU Buxton R S  
SO JOURNAL OF GENERAL MICROBIOLOGY, (1978 Apr) 105 (2) 175-85.  
Journal code: 0375371. ISSN: 0022-1287.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 197806  
ED Entered STN: 19900314  
Last Updated on STN: 19900314  
Entered Medline: 19780617

L7 ANSWER 18 OF 68 MEDLINE  
AN 76134909 MEDLINE  
DN 76134909 PubMed ID: 175748  
TI Effect of aeration on the activity of gluconeogenic enzymes in Saccharomyces cerevisiae growing under glucose limitation.  
AU Haarasilta S; Oura E  
SO ARCHIVES OF MICROBIOLOGY, (1975 Dec 31) 106 (3) 271-3.  
Journal code: 0410427. ISSN: 0302-8933.  
CY GERMANY, WEST: Germany, Federal Republic of  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 197604  
ED Entered STN: 19900313  
Last Updated on STN: 19980206  
Entered Medline: 19760423

L7 ANSWER 19 OF 68 MEDLINE  
AN 74168570 MEDLINE  
DN 74168570 PubMed ID: 4208415  
TI **Pyruvate carboxylase** deficiency in pleiotropic carbohydrate-negative mutant strains of Pseudomonas aeruginosa.  
AU Phibbs P V Jr; Feary T W; Blevins W T  
SO JOURNAL OF BACTERIOLOGY, (1974 Jun) 118 (3) 999-1009.  
Journal code: 2985120R. ISSN: 0021-9193.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 197407

ED Entered STN: 19900310  
Last Updated on STN: 19970203  
Entered Medline: 19740719

L7 ANSWER 20 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 2000:502705 SCISEARCH  
GA The Genuine Article (R) Number: 328ML  
TI Mutations in GAL2 or GAL4 alleviate catabolite repression produced by  
galactose in *Saccharomyces cerevisiae*  
AU Rodriguez C; Flores C L (Reprint)  
CS UNIV AUTONOMA MADRID, CSIC, INST INVEST BIOMED ALBERTO SOLS, UNIDAD  
BIOQUIM & GENET LEVADURAS, E-28029 MADRID, SPAIN (Reprint); UNIV AUTONOMA  
MADRID, CSIC, INST INVEST BIOMED ALBERTO SOLS, UNIDAD BIOQUIM & GENET  
LEVADURAS, E-28029 MADRID, SPAIN; UNIV LA HABANA, FAC BIOL, DEPT BIOQUIM,  
HAVANA, CUBA  
CYA SPAIN; CUBA  
SO ENZYME AND MICROBIAL TECHNOLOGY, (JUN 2000) Vol. 26, No. 9-10,  
pp. 748-755.  
Publisher: ELSEVIER SCIENCE INC, 655 AVENUE OF THE AMERICAS, NEW YORK, NY  
10010.  
ISSN: 0141-0229.  
DT Article; Journal  
FS LIFE; AGRI  
LA English  
REC Reference Count: 44  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

=> d 21-30

L7 ANSWER 21 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 96:598989 SCISEARCH  
GA The Genuine Article (R) Number: VB017  
TI MATHEMATICAL-MODELING OF THE CRITIC ACID CYCLE FOR THE ANALYSIS OF  
GLUTAMINE ISOTOPOMERS FROM CEREBELLAR ASTROCYTES INCUBATED WITH  
[1-C-13]GLUCOSE  
AU MERLE M; MARTIN M; VILLEGIER A; CANIONI P (Reprint)  
CS UNIV BORDEAUX 2, UNITE RESONANCE MAGNET SYST BIOL, UMR 5536 CNRS, 146 RUE  
LEO SAIGNAT, F-33076 BORDEAUX, FRANCE (Reprint); UNIV BORDEAUX 2, UNITE  
RESONANCE MAGNET SYST BIOL, UMR 5536 CNRS, F-33076 BORDEAUX, FRANCE  
CYA FRANCE  
SO EUROPEAN JOURNAL OF BIOCHEMISTRY, (01 AUG 1996) Vol. 239, No. 3,  
pp. 742-751.  
ISSN: 0014-2956.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 21  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L7 ANSWER 22 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 94:177461 SCISEARCH  
GA The Genuine Article (R) Number: MZ715  
TI EFFECTS OF PHOSPHOENOL PYRUVATE-CARBOXYLASE DEFICIENCY ON METABOLISM AND  
LYSINE PRODUCTION IN *CORYNEBACTERIUM-GLUTAMICUM*  
AU GUBLER M (Reprint); PARK S M; JETTEN M; STEPHANOPOULOS G; SINSKEY A J  
CS HOFFMANN LA ROCHE AG, CH-4002 BASEL, SWITZERLAND (Reprint); MIT, DEPT  
BIOL, CAMBRIDGE, MA, 02139; MIT, DEPT CHEM ENGN, CAMBRIDGE, MA, 02139  
CYA SWITZERLAND; USA  
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (FEB 1994) Vol. 40, No.  
6, pp. 857-863.  
ISSN: 0175-7598.  
DT Article; Journal  
FS LIFE; AGRI  
LA ENGLISH  
REC Reference Count: 33  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L7 ANSWER 23 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)

AN 91:369598 SCISEARCH  
GA The Genuine Article (R) Number: FT788  
TI **PYRUVATE-CARBOXYLASE DEFICIENCY - A BENIGN  
VARIANT WITH NORMAL DEVELOPMENT**  
AU VANCOSTER R N; FERNHOFF P M; DEVIVO D C (Reprint)  
CS COLUMBIA PRESBYTERIAN MED CTR, DIV PEDIAT NEUROL, NEW YORK, NY, 10032;  
EMORY UNIV, SCH MED, DEPT PEDIAT, DIV MED GENET, ATLANTA, GA, 30322  
CYA USA  
SO PEDIATRIC RESEARCH, (1991) Vol. 30, No. 1, pp. 1-4.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 36  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L7 ANSWER 24 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 87:573195 SCISEARCH  
GA The Genuine Article (R) Number: K3038  
TI **PYRUVATE-CARBOXYLASE IN THE YEAST PYC MUTANT**  
AU LIM F; ROHDE M; MORRIS C P; WALLACE J C (Reprint)  
CS UNIV ADELAIDE, DEPT BIOCHEM, ADELAIDE, SA 5001, AUSTRALIA  
CYA AUSTRALIA  
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1987) Vol. 258, No. 1,  
pp. 259-264.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 16

L7 ANSWER 25 OF 68 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 85:108797 SCISEARCH  
GA The Genuine Article (R) Number: ABZ03  
TI **PYRUVATE-CARBOXYLASE DEFICIENCY IN YEAST - A  
MUTANT AFFECTING THE INTERACTION BETWEEN THE GLYOXYLATE AND KREBS  
CYCLES**  
AU WILLS C (Reprint); MELHAM T  
CS UNIV CALIF SAN DIEGO, DEPT BIOL, LA JOLLA, CA, 92093 (Reprint)  
CYA USA  
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1985) Vol. 236, No. 2,  
pp. 782-791.  
DT Article; Journal  
FS LIFE  
LA ENGLISH  
REC Reference Count: 27

L7 ANSWER 26 OF 68 LIFESCI COPYRIGHT 2003 CSA  
AN 95:22015 LIFESCI  
TI **Pyruvate carboxylase deficiency: A benign  
variant with normal development**  
AU Coster, R.N.V.; Fernhoff, P.M.; De Vivo, D.C.\*  
CS Neurol. Inst., 710 W. 168 St., New York, NY 10032, USA  
SO PEDIATR. RES., (1991) vol. 30, no. 1, pp. 1-4.  
DT Journal  
FS G  
LA English  
SL English

L7 ANSWER 27 OF 68 LIFESCI COPYRIGHT 2003 CSA  
AN 81:22368 LIFESCI  
TI Interaction Between Aminoglycoside and Doxorubicin on E. coli Wild Strain  
and Respiratory Deficient Mutant.  
AU Morvillo, E.; Sanfilippo, A.; Schioppacassi, G.  
CS Farmitalia Carlo Erba, Res. Lab., Via Giovanni XXIII, 20014 Nerviano (Mi),  
Italy  
SO MICROBIOLOGICA (BOLOGNA)., (1981) vol. 4, no. 4, pp. 421-430.  
DT Journal  
FS J; A; G  
LA English  
SL English

L7, ANSWER 28 OF 68 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI  
AN 1997-04725 BIOTECHDS  
TI DNA encoding **mutant pyruvate-carboxylase**;  
Zymomonas mobilis recombinant enzyme preparation by vector expression  
in host cell  
AU Bruhn H; Pohl M; Mesch K; Kula M R  
PA Forsch.Zent.Juelich  
LO Juelich, Germany.  
PI WO 9637620 28 Nov 1996  
AI WO 1996-DE928 22 May 1996  
PRAI DE 1995-1023269 29 Jun 1995; DE 1995-101880P 26 May 1995  
DT Patent  
LA English  
OS WPI: 1997-033996 [03]

L7 ANSWER 29 OF 68 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI  
AN 1986-06526 BIOTECHDS  
TI Properties of Candida lipolytica mutants with the modified glycoylate  
cycle and their ability to produce citric and isocitric acid: I.  
Physiological, biochemical and cytological characteristics of mtuants  
grown on glucose or hexadecane;  
comparison with wild-type strain; n-alkane utilization by mutant  
AU Ermakova I T; Shishkanova N V; Melnikova O F; \*Finogenova T V  
LO Institute of Biochemistry and Physiology of Microorganisms, USSR Academy  
of Sciences, Pushchino, Moscow region, 142292, USSR.  
SO Appl.Microbiol.Biotechnol.; (1986) 23, 5, 372-77  
CODEN: EJABDD  
DT Journal  
LA English

L7 ANSWER 30 OF 68 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI  
AN 1984-01310 BIOTECHDS  
TI Genetic and physiological studies on carbon metabolism in Aspergillus  
nidulans;  
analysis of glycolytic mutants and C-metabolism in vivo (conference  
abstract)  
AU Bos C J; Dijkena C; Kester H C W; Kobus G; Visser J  
LO Department of Genetics, Agricultural University, Gen. Foulkesweg 53, 6703  
EM Wageningen, The Netherlands.  
SO Symp.Biotechnol.Res.Neth; (1983) 172  
DT Journal  
LA English

=> s l7 and (resistant or desensiti?)  
L8 4 L7 AND (RESISTANT OR DESENSITI?)

=> d 1-4

L8 ANSWER 1 OF 4 SCISEARCH COPYRIGHT 2003 ISI (R)  
AN 94:177461 SCISEARCH  
GA The Genuine Article (R) Number: MZ715  
TI EFFECTS OF PHOSPHOENOL PYRUVATE-CARBOXYLASE DEFICIENCY ON METABOLISM AND  
LYSINE PRODUCTION IN CORYNEBACTERIUM-GLUTAMICUM  
AU GUBLER M (Reprint); PARK S M; JETTEN M; STEPHANOPOULOS G; SINSKEY A J  
CS HOFFMANN LA ROCHE AG, CH-4002 BASEL, SWITZERLAND (Reprint); MIT, DEPT  
BIOL, CAMBRIDGE, MA, 02139; MIT, DEPT CHEM ENGN, CAMBRIDGE, MA, 02139  
CYA SWITZERLAND; USA  
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (FEB 1994) Vol. 40, No.  
6, pp. 857-863.  
ISSN: 0175-7598.  
DT Article; Journal  
FS LIFE; AGRI  
LA ENGLISH  
REC Reference Count: 33  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

L8 ANSWER 2 OF 4 LIFESCI COPYRIGHT 2003 CSA

AN 81:22368 LIFESCI  
TI Interaction Between Aminoglycoside and Doxorubicin on E. coli Wild Strain  
and Respiratory Deficient Mutant.  
AU Morvillo, E.; Sanfilippo, A.; Schioppacassi, G.  
CS Farmitalia Carlo Erba, Res. Lab., Via Giovanni XXIII, 20014 Nerviano (Mi),  
Italy  
SO MICROBIOLOGICA (BOLOGNA)., (1981) vol. 4, no. 4, pp. 421-430.  
DT Journal  
FS J; A; G  
LA English  
SL English

L8 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 1983:260535 BIOSIS  
DN BA76:18027  
TI PROPERTIES OF A BACILLUS-SUBTILIS MUTANT ABLE TO SPORULATE CONTINUALLY  
DURING GROWTH IN SYNTHETIC MEDIUM.  
AU ENDO T; ISHIHARA H-O; FREESE E  
CS LAB. MOLECULAR BIOL., NATIONAL INSTITUTE NEUROL. COMMUNICATIVE DISORDERS  
STROKES, NIH, BUILDING 36, ROOM 3D02, BETHESDA, MARYLAND 20205.  
SO J GEN MICROBIOL, (1983) 129 (1), 17-30.  
CODEN: JGMIAN. ISSN: 0022-1287.  
FS BA; OLD  
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L8 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 1977:230504 BIOSIS  
DN BA64:52868  
TI STUDIES ON THE ALLO STERIC PROPERTIES OF **MUTATIONALLY** ALTERED  
PHOSPHOENOL **PYRUVATE CARBOXYLASES** EC-4.1.1.31 OF  
ESCHERICHIA-COLI DISCRIMINATION OF ALLO STERIC SITES.  
AU MORIKAWA M; IZUI K; KATSUKI H  
SO J BIOCHEM (TOKYO), (1977) 81 (5), 1473-1486.  
CODEN: JOBIAO. ISSN: 0021-924X.  
FS BA; OLD  
LA Unavailable

=> d 1 ab

L8 ANSWER 1 OF 4 SCISEARCH COPYRIGHT 2003 ISI (R)  
AB The phosphoenol pyruvate carboxylase gene (ppc) of lysine-producing  
Corynebacterium glutamicum and C. lactofermentum strains was inactivated  
by marker exchange **mutagenesis**. The **mutants** lacked  
completely phosphoenol **pyruvate carboxylase** (PEP  
carboxylase) activity, but grew in minimal medium containing glucose as  
the sole carbon source. In addition, the ppc(-) strains produced  
equivalent titers of lysine in shake flasks and in 10-1 fermentation  
experiments as their parent strains. To address the question of how ppc(-)  
Corynebacterium strains generate oxaloacetate (OAA) for their own  
metabolism as well as for high-level lysine production, we measured the  
activities of enzymes leading to OAA synthesis. Whereas pyruvate  
carboxylase activity was not detected in any of the strains, phosphoenol  
pyruvate carboxykinase (PEP carboxykinase) activity was found to be  
significantly higher in C. glutamicum ppc mutants compared to the parent  
strains. On the other hand, PEP carboxykinase activity in C.  
lactofermentum was essentially absent. As glyoxylate cycle enzymes are  
strongly repressed by glucose, they are not likely to compensate for the  
lack of PEP carboxylase activity. PEP carboxykinase, among several  
candidates, could play this role.

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FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS,  
NTIS, ESBIODBASE, BIOTECHNO, WPIDS' ENTERED AT 13:05:34 ON 16 APR 2003

L1 8868 S PYRUVATE CARBOXYLASE

L2 269 S L1 (10A) (MUTA? SUBSTITUT? OR REPLACE?)  
L3 296 S L1 (10A) (MUTA? OR SUBSTITUT? OR VARIANT OR REPLACE?)  
L4 117 DUP REM L3 (179 DUPLICATES REMOVED)  
L5 210 S L1 (5A) (MUTA? OR VARIANT)  
L6 83 DUP REM L5 (127 DUPLICATES REMOVED)  
L7 68 S L6 AND PY<=2000  
L8 4 S L7 AND (RESISTANT OR DESENSITI?)

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